



S7045G

(UL ANSL: FR-4.1)High Tg, Halogen Free & Mid Loss Material

FEATURES

- Anti-CAF capability
- Excellent through-hole Reliability
- Low insertion loss, Dk/Df@1GHz:4.3/0.010

APPLICATIONS

Server, Switch, Base station, Computer peripherals

GENERAL PROPERTIES

Test Items	Test Method	Test Condition	Unit	Typical Value	
Tg	IPC-TM-650 2.4.24.4	DMA	°C	190	
	IPC-TM-650 2.4.25D	DSC	°C	175	
Td	IPC-TM-650 2.4.24.6	TGA (5% W.L)	°C	390	
T288	IPC-TM-650 2.4.24.1	TMA	min	60	
T260	IPC-TM-650 2.4.24.1	TMA	min	60	
Thermal Stress	IPC-TM-650 2.4.13.1	288°C, solder dip	s	>100	
CTE(Z-axis)	IPC-TM-650 2.4.24	Before Tg	ppm/°C	40	
	IPC-TM-650 2.4.24	After Tg	ppm/°C	210	
	IPC-TM-650 2.4.24	50-260°C	%	2.3	
Permittivity (RC54%)	(1GHz)	IPC-TM-650 2.5.5.9	C-24/23/50	-	4.30
	(10GHz)	IPC-TM-650 2.5.5.5	C-24/23/50	-	4.15
	(10GHz)	IEC 61189-2-721	C-24/23/50	-	4.50
Loss Tangent (RC54%)	(1GHz)	IPC-TM-650 2.5.5.9	C-24/23/50	-	0.010
	(10GHz)	IPC-TM-650 2.5.5.5	C-24/23/50	-	0.013
	(10GHz)	IEC 61189-2-721	C-24/23/50	-	0.013
Volume Resistivity	IPC-TM-650 2.5.17.1	C-96/35/90	MΩ-cm	5.5×10 ⁷	
Surface Resistivity	IPC-TM-650 2.5.17.1	C-96/35/90	MΩ	6.0×10 ⁷	
Arc Resistance	IPC-TM-650 2.5.1	D-48/50+D-0.5/23	s	180	
Dielectric Breakdown	IPC-TM-650 2.5.6	D-48/50+D-0.5/23	kV	>45	
Peel Strength (1oz)	IPC-TM-650 2.4.8	288°C/10s	N/mm [lb/in]	1.0 [5.71]	
Flexural Strength (LW/CW)	IPC-TM-650 2.4.4	A	Mpa	550/450	
Water Absorption	IPC-TM-650 2.6.2.1	D-24/23	%	0.12	
Flammability	UL94	C-48/23/50	Rating	V-0	
CTI	IEC60112	A	Rating	PLC3	

Remarks : 1. Specification sheet IPC-4101/130, is for your reference only.

2. All the typical value is based on 0.76mm(6*2116) thickness with RTF copper specimen.

3. All the typical value listed above is for your reference only, please turn to Shengyi Technology Co., Ltd. for detailed information, and all rights from this data sheet are reserved by Shengyi Technology Co., Ltd.